### **Marine Life Protection Act Initiative**



# Habitat Evaluations of Round 2 NCRSG Draft MPA Proposals for the North Coast Study Region

Presentation to the MLPA Blue Ribbon Task Force July 21, 2010 • Fort Bragg, CA

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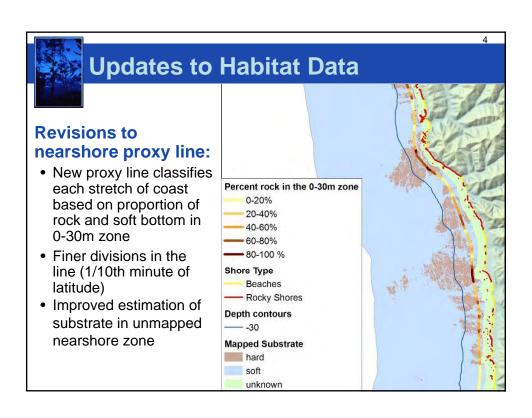
## **Notes on Round 2 Evaluations**

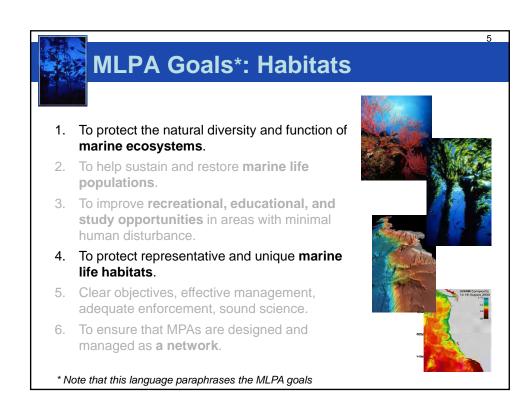
- No high protection MPAs recommended in any proposal, thus evaluations at high protection omitted from all evaluation materials
- All proposals include undefined, tribal, consumptive uses in some MPAs, however insufficient information provided to allow assignment of level of protection for uses
  - MPAs proposed to allow only tribal, consumptive uses:
     Assigned an "undetermined" level of protection
  - All other MPAs, including MPAs proposed to allow undefined, tribal, consumptive uses and other defined uses: Assigned level of protection based on defined uses only
  - No very high protection SMRs propose consumptive uses (including tribal consumptive uses) in Round 2

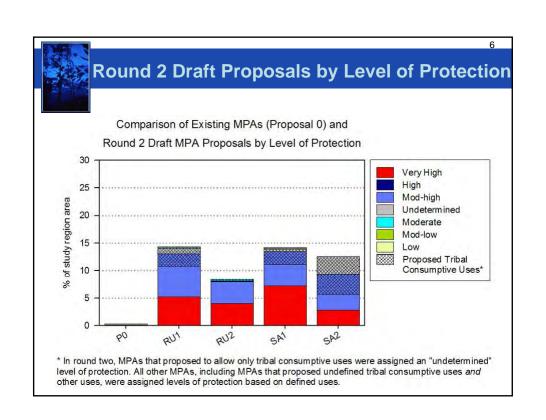


**Notes on Round 2 Evaluations** 

- Recent revisions to the 0-30 meter (m) proxy line are reflected in evaluation results
  - Replication in one MPA was altered by the revisions:
     Vizcaino SMCA in Sapphire 2 lost one replicate of 0-30m rock as measured by revised proxy line compared to original proxy line
- MPAs must span the *entire* 0-30 meter depth zone to replicate habitats in that zone (0-30m rock, 0-30m soft bottom, kelp)
  - Not new guidance, however application has become more relevant due to numerous inshore-offshore MPA clusters
  - Further information with an example provided in replication section of this presentation



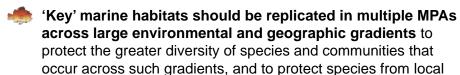




Habitat Protection Guidelines



Every 'key' marine habitat should be represented in the MPA network to protect the diversity of species that live in different habitats and those that move among different habitats over their lifetime.



At least three to five replicate MPAs should be designed for each habitat type within a <a href="biogeographical region">biogeographical region</a> to provide analytical power for management comparisons and to buffer against catastrophic loss of an MPA.

year-to-year fluctuations in larval production and recruitment.

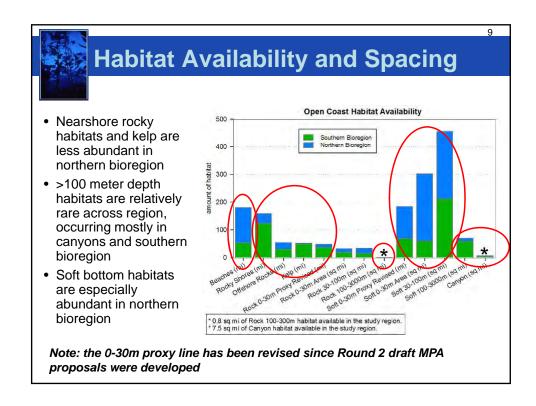


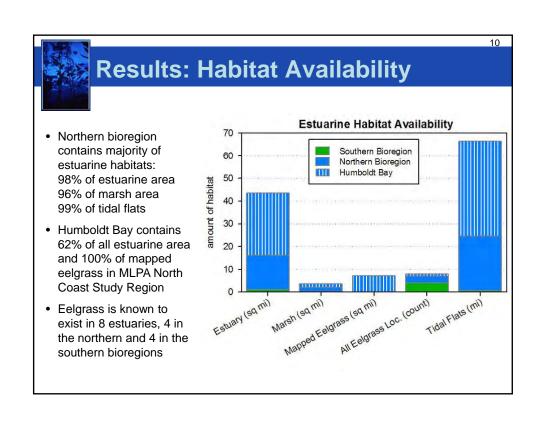
# **Evaluation: Habitats**

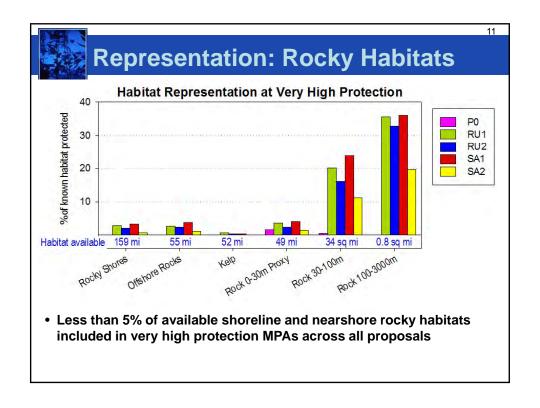
**Key Questions for Each Draft MPA Proposal** 

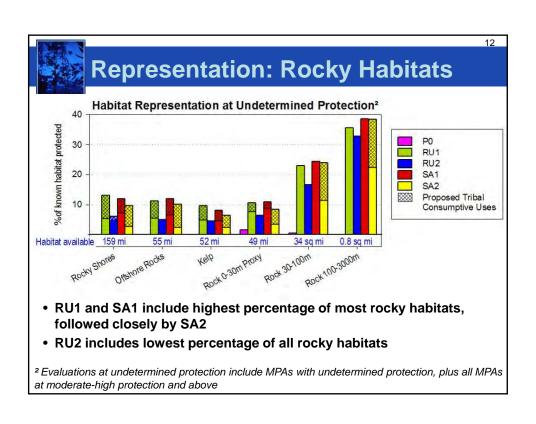
- 1. How well are key habitat types represented in draft MPA proposals?
- 2. What are the proposed levels of protection for these habitat types?
- 3. How well are habitats and levels of protection distributed across the study region?

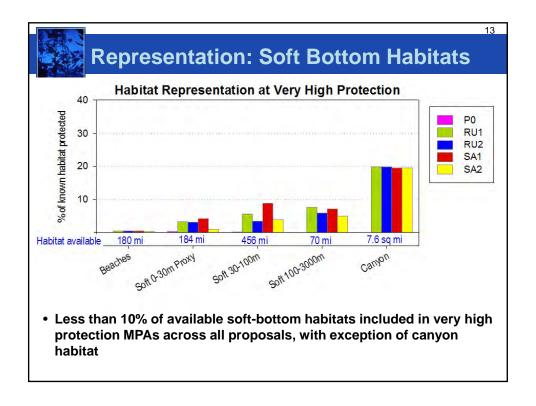
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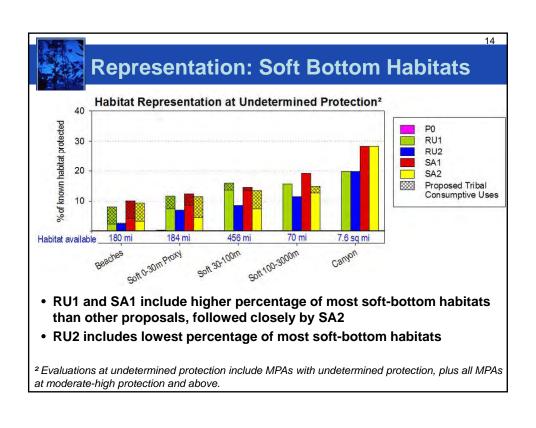


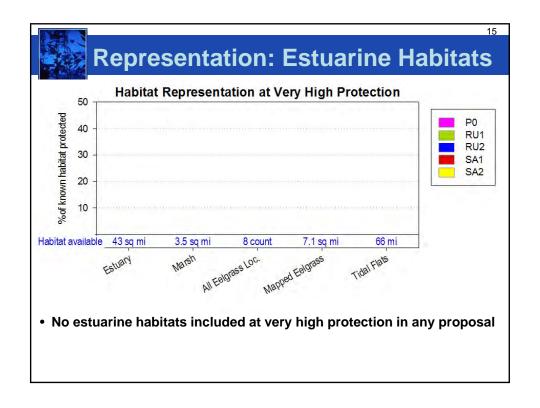


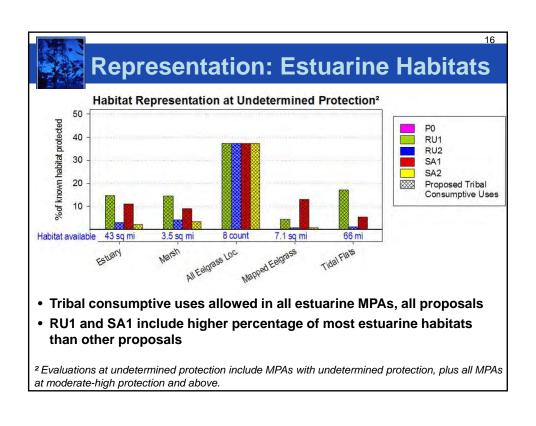


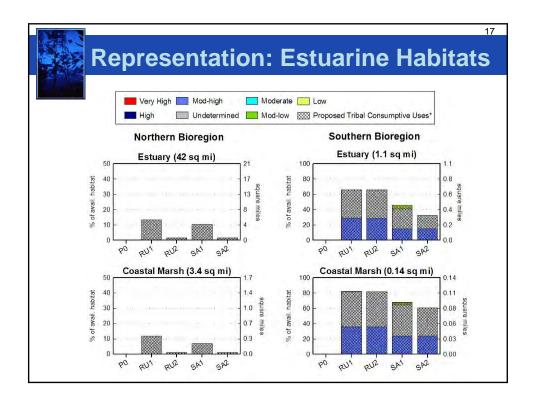














# **Results: Habitat Representation**

### **Summary**



Low percentages of shoreline, nearshore, and estuarine habitats included in very high protection MPAs across all proposals



On average, SA1 included largest proportion of open coast habitats in MPAs and RU2 smallest proportion, regardless of protection level



On average RU1 included largest proportion of estuarine habitats in MPAs



Ranking of proposals by average representation across all habitats:

At moderate-high protection: SA1 > RU1 > SA2 > RU2 At undetermined protection: same ranking



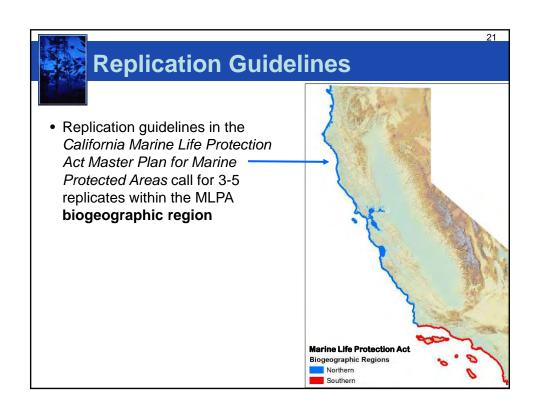


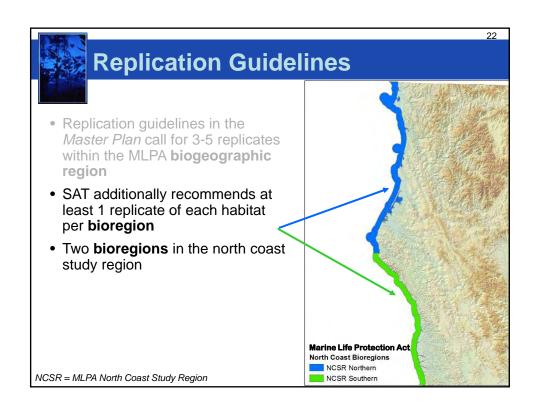
# **Methods: Habitat Replication**

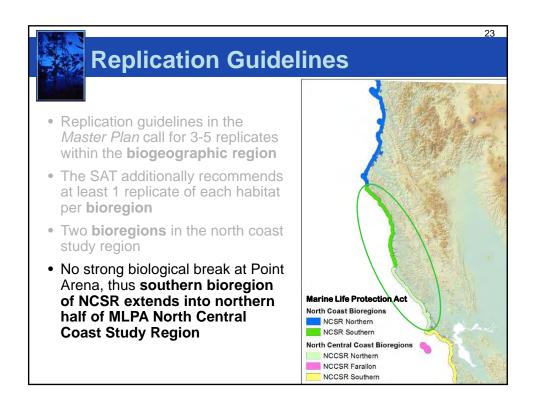
#### **Guidelines for Replication**

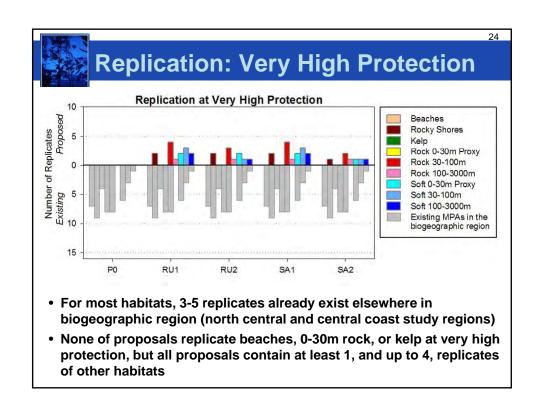
- 3-5 replicates of habitat per biogeographic region (i.e., from Point Conception to the California-Oregon border)
- SAT recommends at least 1 replicate of each habitat in each of the two north coast bioregions, if possible
- MPA or cluster must meet minimum size guidelines (9 square miles)
- Habitat must meet threshold identified to encompass 90% of biodiversity in that habitat type
- To replicate nearshore habitats, entire 0-30m zone must be included in MPA or cluster
- Estuarine MPAs do not have to meet size guidelines but must contain at least 0.12 square miles of estuarine habitat

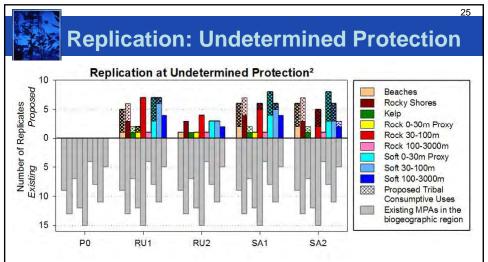
#### Replicating Nearshore Habitats proxy line where 30m contour nearshore To replicate nearshore habitats are habitats, entire 0-30m measured zone must be included in MPA or cluster Activities in the inshore MPA may impact species in 0-30m zone **SMR** Replication of 0-30m habitats only at a level of protection threshold that includes both inshore SMCA that allows and offshore MPAs extraction of species that inhabit the 0-30m zone



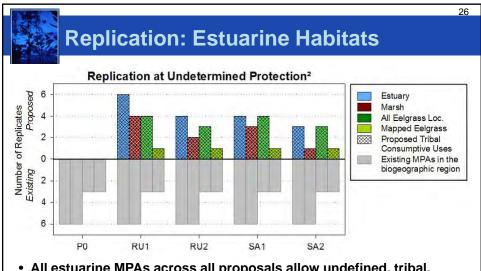








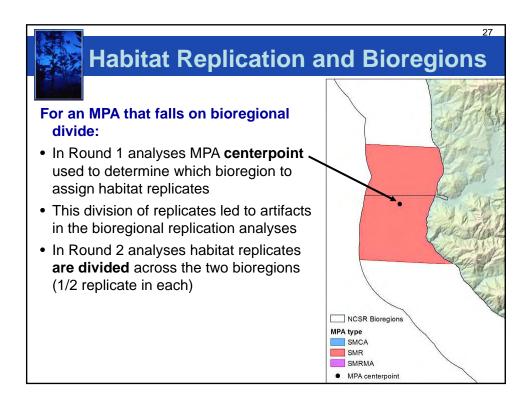
- Many replicates of shoreline and soft bottom habitats allow undefined consumptive tribal uses in proposals RU1, SA1, and SA2
- All proposals include at least 1, and up to 8, replicates of each habitat with exception of 0-30m rock in SA2

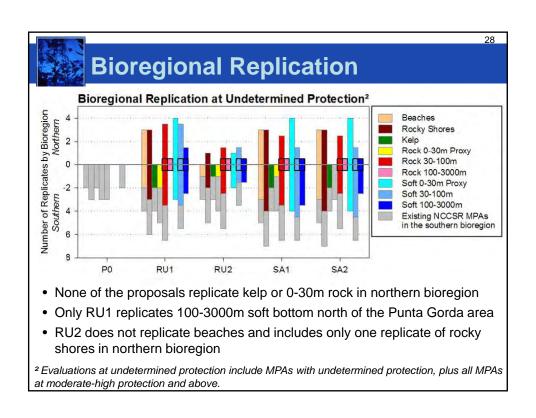


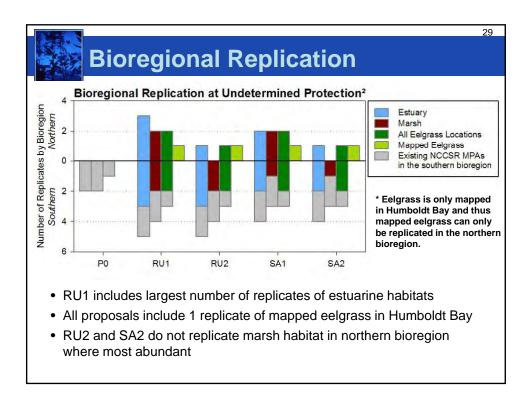
- All estuarine MPAs across all proposals allow undefined, tribal, consumptive uses
- RU1 includes largest number of replicates of most estuarine habitats, followed by SA1

<sup>&</sup>lt;sup>2</sup> Evaluations at undetermined protection include MPAs with undetermined protection, plus all MPAs at moderate-high protection and above.

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# Results: Habitat Replication

#### **Summary**

- All habitats already replicated in at least 3-5 MPAs at or above mod-high protection elsewhere in biogeographic region (north central coast or central coast)
- On average, SA1 and RU1 include largest number of replicates of all habitats, regardless of protection level
- None of the proposals replicate kelp or 0-30m rock in northern bioregion at or above mod-high
- None of the proposals replicate any estuarine habitats at very high protection, but RU1 includes largest number of estuarine habitat replicates at undetermined protection, followed by SA1 Ranking of proposals for replication across all habitats:
  - At mod-high protection: SA1 > RU1 > SA2 > RU2
    At undetermined protection: RU1 > SA1 > SA2 > RU2

